

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A bi-directional tool for applying a drive torque comprising:

a flexible head having a split aperture therein that defines a torque-applying gripping surface;

an elongate handle; and

cam means arranged to couple the handle and the flexible head and effective to close the split aperture and increasingly tighten a grip applied by the torque-applying gripping surface as more torque is applied to the handle, said cam means comprising two slots provided in the flexible head and respective pins located in said slots, said slots extending divergently outwardly with respect to said split aperture and said pins being fixedly connected to said elongate handle

wherein the flexible head comprises a flexible ring having a pair of circumferentially spaced surfaces extending in a radially outward direction from said torque-applying gripping surface to define said split aperture.

2-3. (Cancelled).

4. (Previously amended) A drive tool as claimed in claim 1, wherein the cam means further comprises a surface on the elongate handle extending in a direction transverse to a longitudinal axis of the elongate handle for engagement with the flexible head to move the flexible head when said torque is applied to the handle.

5. (Previously amended) A drive tool as claimed in claim 1, further comprising two plates mounted on opposed sides of the elongate handle at one end thereof to define an end surface of the handle with a recess therebetween, a portion of the flexible head being mounted in the recess.

6. (Cancelled).

7. (Currently amended) A drive tool as claimed in claim 1 ~~claim 6~~, wherein the circumferentially spaced surfaces diverge outwardly from the torque-applying gripping surface.

8-26. (Cancelled).

27. (Previously presented) A drive tool as claimed in claim 1, wherein said torque-applying gripping surface comprises a plurality of surface portions that define a polygonal aperture.

28. (Previously presented) A drive tool as claimed in claim 27, wherein said torque-applying gripping surface defines respective recesses that separate adjacent said surface portions.

29. (Previously presented) A drive tool as claimed in claim 28, wherein said recesses are arcuate in cross-section.

30. (Previously presented) A drive tool as claimed in claim 1, wherein said flexible head is irremovably coupled to said elongate handle portion by said cam means.

31. (Previously presented) A drive tool as claimed in claim 1, wherein each of said diverging slots is a closed slot having opposed ends.

32. (Currently amended) A bi-directional drive tool for applying a drive torque, said drive tool comprising:

a flexible head having an internal torque-applying gripping wall defining an opening and a slot extending from said opening to an outer wall of said flexible head; and

an elongate handle pivotally connected to said flexible head by a cam mechanism, said cam mechanism comprising two apertures defined by said flexible head and respective pivot members that are fixed with respect to the elongate handle, said pivot members extending through the respective apertures and said apertures defining respective elongate camming surfaces that diverge away from said opening such that when an input torque is applied to said elongate handle a force that tends to close said slot is applied to the flexible head via said cam mechanism to cause the application of a gripping force by said torque-applying gripping wall;

wherein said slot extends between said elongate apertures.

33. (Previously presented) A drive tool as claimed in claim 32, wherein said flexible head comprises a generally C-shaped arcuate portion and respective ears extending from opposite ends of said arcuate portion, said slot being defined between said ears and said elongate apertures being disposed one in each ear.

34. (Cancelled)

35. (Previously presented) A drive tool as claimed in claim 32, wherein said flexible head comprises a first portion that defines said torque-applying gripping surface and opposed ears extending from said first portion and defining said slot therebetween, said elongate handle comprising respective surface portions operable to bear against the ears according to the direction of said input torque applied to the elongate handle to increase said force that tends to close said slot.

36. (Previously presented) A drive tool as claimed in claim 32, further comprising a resiliently biased detent member carried by said elongate handle, the arrangement being such that said resiliently biased detent member engages in an end of said slot at said outer wall of the flexible head when the elongate handle is aligned with the slot.

37. (Previously presented) A drive tool as claimed in claim 36, wherein respective recesses are defined in said outer wall on either side of said end of the slot for locking engagement with said resiliently biased detent member when said lever arm is pivoted out of alignment with said slot.

38. (Previously presented) A drive tool as claimed in claim 32, further comprising a second said flexible head pivotally connected to said elongate handle by said cam mechanism, said flexible heads being disposed one above the other in overlying relationship.

39. (Currently amended) ~~A drive tool as claimed in claim 32,~~ A bi-directional drive tool for applying a drive torque, said drive tool comprising:

a flexible head having an internal torque-applying gripping wall defining an opening and a slot extending from said opening to an outer wall of said flexible head; and an elongate handle pivotally connected to said flexible head by a cam mechanism, said cam mechanism comprising two apertures defined by said flexible head and respective pivot members that are fixed with respect to the elongate handle, said pivot members extending through the respective apertures and said apertures defining respective elongate camming surfaces that diverge away from said opening such that when an input torque is applied to said elongate handle a force that tends to close said slot is applied to the flexible head via said cam mechanism to cause the application of a gripping force by said torque-applying gripping wall;

wherein said internal torque-applying gripping wall comprises a plurality of segments arranged such that said opening is polygonal and respective recesses between adjacent said segments.

40. (Previously presented) A drive tool as claimed in claim 39, wherein said recesses have a curved cross-section.

41. (Currently amended) ~~A drive tool as claimed in claim 32;~~ A bi-directional drive tool for applying a drive torque, said drive tool comprising:

a flexible head having an internal torque-applying gripping wall defining an opening and a slot extending from said opening to an outer wall of said flexible head; and an elongate handle pivotally connected to said flexible head by a cam mechanism, said cam mechanism comprising two apertures defined by said flexible head and respective pivot members that are fixed with respect to the elongate handle, said pivot members extending through the

respective apertures and said apertures defining respective elongate camming surfaces that diverge away from said opening such that when an input torque is applied to said elongate handle a force that tends to close said slot is applied to the flexible head via said cam mechanism to cause the application of a gripping force by said torque-applying gripping wall;

wherein said internal torque-applying gripping wall is a curved wall.

42. (Previously presented) A drive tool as claimed in claim 41, further comprising a drive device having a curved external wall for mating with said internal torque-applying gripping wall and defining a polygonal aperture for engaging a fastener to which a drive torque is to be applied.

43. (Previously presented) A drive tool as claimed in claim 41, further comprising a drive device having a curved external wall for mating with said internal torque-applying gripping wall and including a post insertable into a socket that is engageable with a fastener to which a drive torque is to be applied.

44. (Previously presented) A bi-directional drive tool for use in applying a torque to a fastener, said tool comprising:

a flexible head having a first portion that includes an internal torque-applying gripping wall that defines an opening and first and second projecting portions extending radially outwardly with respect to said opening from said first portion, said projecting portions defining a slot therebetween that extends from a first open end that opens into said opening to a second open end at an outer wall of the flexible head;

an elongate handle pivotally connected to said flexible head, said elongate handle having a longitudinal axis and being pivotable to a first side and a second side of a neutral position in which neutral position said longitudinal axis is aligned with said slot; and

a cam mechanism comprising a first aperture defined in said first projecting portion and disposed on said first side of the neutral position, a second aperture defined in said second projecting portion and on said second side of the neutral position and respective pivot pins extending through said first and second apertures and fixedly connected to said elongate handle, the first and second apertures defining respective elongate camming surfaces that diverge away from said opening whereby when an input torque applied to said elongate handle causes the handle to pivot to said first side of the neutral axis the pivot pin in said first aperture engages an end of said aperture to act as a fulcrum and the pivot pin in said second aperture moves along the camming surface of the aperture away from said opening applying a force to the second projecting portion that causes the slot to narrow to close the opening to cause said internal torque-applying gripping wall to grip for applying said input torque to a fastener and when an input torque applied to said elongate handle causes the handle to pivot to said second side of the neutral axis the pivot pin in said second aperture engages an end of said aperture to act as a fulcrum and the pivot pin in said first aperture moves along the camming surface of the aperture away from said opening applying a force to the first projecting portion that causes the slot to narrow to close the opening to cause said internal torque-applying gripping wall to grip for applying said torque to a fastener.

45. (Currently amended) A drive tool as claimed in claim 1 ~~claim 6~~, further comprising a detent comprising a compression spring located in a recess extending axially in said elongate handle

and a ball cam located at a free end of the compression spring for location between radially outermost ends of the circumferentially spaced surfaces of the flexible head.

46. (Currently amended) A drive tool as claimed in claim 1 ~~claim 6~~, comprising respective recesses in said circumferentially spaced surfaces for receiving a detent member therein to lock said split aperture in a closed condition absent a torque applied to said elongate handle.

47. (Previously presented) A drive tool as claimed in claim 46, wherein the detent member comprises a cylinder having a curved surface at one end for engaging in the respective recesses.

48. (Previously presented) A drive tool as claimed in claim 1, wherein the elongate handle comprises a handle portion and a plate formed integrally with the handle portion as a one piece handle and said pins are fixed to said plate.

49. (Previously presented) A drive tool as claimed in claim 1, wherein the elongate handle comprises an elongate portion and two opposed spaced plates formed with the elongate portion as a one piece handle and extending from an end of the elongate portion to define a recess for housing a portion of said flexible head to which the handle is coupled by said cam means.